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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,865

10/21/2005

Akira Nakayama

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2292 7590 06/24/2009
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EXAMINER

RHEE, JANE J

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

06/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/553,865	Applicant(s) NAKAYAMA ET AL.	
	Examiner JANE RHEE	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/19/09 has been entered.

Rejection Withdrawn

2. The 35 U.S.C. 102(b) rejection of claims 1-12 anticipated by Yamamoto et al. has been withdrawn due to applicant's amendment/argument filed on 5/19/09.

New Rejections

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al. (JP2003132893).

As to claims 1-2,13 Nakayama et al. discloses a binder for electrode of lithium ion secondary battery, which comprises a copolymer comprising: 15 to 80 weight % of units from an ethylenically unsaturated monomer (A) whose homopolymerization yields

Art Unit: 1795

a polymer soluble in N-methylpyrrolidone (NMP); and 20 to 85 weight % of units from an ethylenically unsaturated monomer (B) whose homopolymerization yields a polymer insoluble in NMP (paragraph 0013-0017) which copolymer exhibits a swelling degree of 4 or below in an electrolyte obtained by dissolving LiPF₆ in the concentration of 1 mole/liter into a solvent of 1:2 (volume ratio at 20.degree. C.) mixture of ethylene carbonate (EC) and diethyl carbonate (DEC) (table 1 and table 2).

As to the copolymer obtained by multistage-polymerizing is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

As to claims 3-4,14 wherein the multistage polymerization comprises a first polymerization step of polymerizing the component (a) and a subsequent second polymerization step of adding the component (b) thereto and polymerizing these components, wherein the first polymerization step is a step of polymerizing 15 to 80 parts by weight of the component (a) until the polymerization conversion ratio thereof reaches 60 to 97 weight %, and the second polymerization step is a step of adding 20 to 85 parts by weight of the component (b) thereto (wherein the amount of all the monomers is 100 parts by weight) and polymerizing the components until the polymerization conversion ratio reaches 90 weight % or more of all the monomers is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or

Art Unit: 1795

obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

As to claims 5-7,15 wherein the multistage polymerization comprises a three-stage polymerization process, wherein the multistage polymerization comprises a first polymerization step of adding a part of the component (a) and then polymerizing it, a subsequent second polymerization step of adding thereto the component (b) and polymerizing the components, and a subsequent third polymerization step of adding thereto the remaining component (a) and polymerizing the components, wherein the first polymerization step is a step of polymerizing 5 to 50 parts by weight of the component (a) until the polymerization conversion ratio thereof reaches 60 to 97 weight %, the second polymerization step is a step of adding 20 to 85 parts by weight of the component (b) thereto and polymerizing the components until the polymerization conversion ratio reaches 60 to 97 weight % of all the monomers added up to this step, and the third polymerization step is a step of adding 5 to 50 parts by weight of the component (a) thereto (wherein the amount of all the monomers is 100 parts by weight) and polymerizing the components until the polymerization conversion ratio reaches 90 weight % or more of all the monomers is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

As to claim 8, Nakayama et al. discloses an active material for an electrode, and an organic liquid medium (paragraph 0006-0007).

As to claim 9, Nakayama et al. discloses wherein the organic liquid medium is N-methylpyrrolidone (paragraph 0007)

As to claim 10, Nakayama et al. discloses a production method for a lithium ion secondary battery electrode, wherein the slurry composition for electrode of lithium ion secondary battery as claimed in claim 8 is applied onto a current collector and then dried (paragraph 0031).

As to claim 11, Nakayama et al. discloses an active material for an electrode is bonded to a current collector (paragraph 0031).

As to claim 12, Nakayama et al. discloses a lithium ion secondary battery, which comprises the electrode as claimed in claim 11 (paragraph 0031).

Response to Arguments

4. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANE RHEE whose telephone number is (571)272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jane Rhee/
Primary Examiner, Art Unit 1795